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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 09/312,841 | 05/17/1999 | TERUYOSHI WASHIZAWA | 862.1426DIV. | 3111 |

5514 7590 01/02/2002

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NEW YORK, NY 10112

EXAMINER

DESIRE, GREGORY M

| ART UNIT | PAPER NUMBER |
|----------|--------------|
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2621

DATE MAILED: 01/02/2002

9

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/312,841

Applicant(s)

WASHIZAWA, TERUYOSHI

Examiner

Gregory M. Desire

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 October 2001.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other: _____

DETAILED ACTION

1. This action is responsive to communication filed 10/1/01.

Response to Amendment

1. Applicant's arguments with respect to claims 1-12 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) do not apply to the examination of this application as the application being examined was not (1) filed on or after November 29, 2000, or (2) voluntarily published under 35 U.S.C. 122(b). Therefore, this application is examined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

3. Claims 1-12 are rejected under 35 U.S.C. 102(e) as being anticipated by Katayama.

Regarding apparatus and method claims 1 and 8 Katayama discloses,

Transformation means for transforming data space of an input image to multi-resolution space outputting a discrete multi-resolution representation of the input image (note fig. 1 blocks 2 in connection with col. 3 lines 29-34 and col. 4 lines 24-30). (The examiner interprets wavelet transformation which divides image into bands, as transforming input image into multi resolution space.);

Detecting means for detecting a singularity in the input image (as disclosed in specification page 18 lines 20-22, detecting singularity is merely detecting an edge or feature point (note fig. 1 block 3, edge detection circuit);

Extracting means for extracting a local pattern, in the neighborhood of each coordinate of the discrete multi-resolution representation of the input image, with regard to each of plurality of depths (note fig. 1 block 4 in connection with col. 3 lines 44-48) (The character area detection extracts and store edge patterns form edge detection circuit with regards to depth values);

Quantizing means for creating a quantization code book based upon the extracted local pattern and replacing each local pattern of respective depths of said discrete multi-resolution representation by a code word using the code book (a code book (LUT) is created based on extracted point (edge values) note col. 5 line 61- col. 6 line 15); and

Encoding means for algebraic encoding data which includes position coordinates of the singularity in the input image and the code word provided by said quantizing means (note fig. 1 block 5, expansion circuit performs encoding procedure);

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Regarding apparatus and method claims 2 and 9 Katayama discloses,

Counting means for counting frequency of occurrence of said local pattern, wherein said quantizing means creates a code book based upon results of counting performed by said counting means (note col. 7 lines 1-10).

Regarding apparatus and method claims 3 and 10 Katayama discloses,

Structuring means for detecting an inclusion relation of any two representative vectors have been registered in said codebook, and structuring said code book (note col. 6 lines 8-10 pattern match detects inclusion relation between vectors stored in code book.).

Regarding apparatus and method claims 4 and 11 Katayama discloses discloses,

Memory means for storing degree of quantization error calculated by said quantizing means, when the local pattern is allocated to a representative vector (note col. 6 lines 22-30).

Deciding means which on the basis of the degree of conformity or quantization error, is for deciding the order relating to the perspective depth between any two representative vectors contained in the code data (note col. 6 lines 40-49);

Regarding apparatus claim 5 Katayama discloses,

Wherein image processing apparatus is applied to image recognition to retrieve image data from partial image (note fig. 21 block 51, receiving circuit image processing apparatus retrieve partial image data).

Regarding method and apparatus claims 6 and 12 Katayama discloses,

Inverse quantizing means (note fig. 21 block 53)

Synthesizing means for combining a plurality of local patterns, which have been generated by said inverse quantizing means based upon position coordinates of a singularity decoded by said decoding means (note fig. 21 block 55)

Regarding apparatus claim 7 Katayama discloses

Comprising memory means for storing code data and outputting the code data stored in said memory means (note fig. 22 block 106).

Conclusion

3. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not

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mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

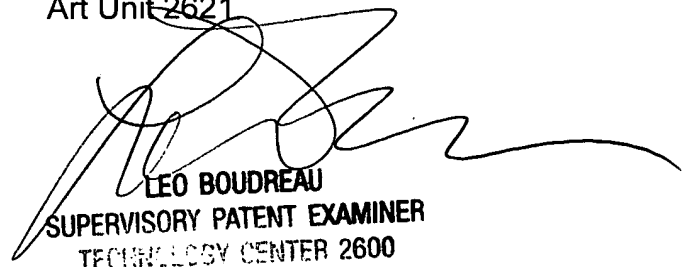
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gregory M. Desire whose telephone number is (703) 308-9586. The examiner can normally be reached on M-F (8:30-6:00) Second Monday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Leo Boudreau can be reached on (703) 305-4706. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 308-5397 for regular communications and (703) 308-5937 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

Gregory M. Desire
Examiner
Art Unit 2621

G.D.
December 29, 2001


LEO BOUDREAU
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600